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Telecommunication apparatus for initiating and receiving voice and data calls, comprising:

a first port to connect said apparatus to a circuit switched telecommunication network;

a second port to connect said apparatus to a packet based telecommunication network; and

gateway means for establishing a path between said first port and said second port inside said apparatus in response to a request imbedded in an incoming call via said second port.

- Telecommunication apparatus according to claim 1, further comprising a third port to connect a conventional telephone apparatus via said telecommunication apparatus to said first port.
- 3. Telecommunication apparatus according to claim 2, further comprising a mechanism to automatically connect said third port directly to said first port in the event of power failure.

System for telecommunication utilizing both a circuit switched telecommunication network and a packet based telecommunication network, comprising: multiple telecommunication apparatuses for initiating and receiving voice and data calls, each said telecommunication apparatus having

a first port connected to said circuit switched telecommunication network; and second port connected to said packet based telecommunication network; and gateway means for establishing a path between said first port and said second port inside said telecommunication apparatus in response to a request imbedded in an incoming call from the packet based telecommunication network, whereby said telecommunication apparatuses can serve as part of a distributed gateway system between said circuit switched telecommunication network and said packet based telecommunication network.

5. System for telecommunication according to claim 4, further comprising gateway location servers connected to said packet based telecommunication network, said gateway location servers being adapted to receive a request from a first telecommunication apparatus connected to said packet based telecommunication network for telecommunication with a specified telephone apparatus on said circuit switched telecommunication network, and further being programmed to select a second of said telecommunication apparatuses to serve as gateway between said networks for said requested connection, and to forward said request to said second telecommunication apparatus via said packet based telecommunication network.

- 6. System for telecommunication according to claim 4, wherein the packet based telecommunication network comprises the Internet.
- 7. System for telecommunication according to claim 5, wherein the packet
- 2 based telecommunication network comprises the Internet.